Amendments to the Claims

This listing of claims will replace all prior versions, and listing of claims in the application:

Listing of Claims

1. (Currently Amended) A process for the manufacture of seed crystals of a molecular sieve selected from the group consisting of LEV, FER, TON, MFS, MFI, MOR, and ZSM-38, , which comprises synthesizing the molecular sieve by treatment of an appropriate synthesis mixture, separating from the treated synthesis mixture ~~a~~ the crystalline molecular sieve comprising particles of a first, larger, particle size in admixture with particles of a second, smaller, size suitable for use as seed crystals, treating the crystalline molecular sieve to separate the larger particles from the smaller particles, and recovering the smaller particles.

2. (Original) A process as claimed in claim 1, wherein separation is effected by dividing the treated synthesis mixture into a liquid component and a crystalline solid component, washing the solid component at least once using a washing medium, and recovering a used washing medium containing the second, smaller size, particles.

3. (Original) A process as claimed in claim 2, wherein separation is effected by decanting.

4. (Original) A process as claimed in claim 2, wherein separation is effected by centrifuging.

5. (Original) A process as claimed in claim 2, wherein separation is effected by filtering.

6. (Original) A process as claimed in claim 2, wherein the solid component is washed a plurality of times until the used washing medium becomes hazy, and the hazy washing medium is recovered.

7. (Original) A process as claimed in claim 1, wherein the second, smaller size, particles have a dimension in the range 20 to 400 nm.

8. (Cancelled)

9. (Cancelled)

10. (Currently Amended) A process as claimed in claim ~~9~~ 1, wherein the ~~zeolite~~ molecular sieve is selected from the group consisting of ZSM-22, ZSM-38, ZSM-45, ZSM-57, NU-3, and Mordenite.

11. (Previously Presented) A process for the manufacture of a crystalline molecular sieve by treatment of a synthesis mixture appropriate for the formation of that molecular sieve, wherein the mixture contains as seeds separated smaller particles prepared in accordance with claim 1.

12. (Original) A process as claimed in claim 11, wherein the concentration of seeds in the synthesis mixture is up to 10000 parts per million, based on the total weight of synthesis mixture.

13. (Original) A process as claimed in claim 12, wherein the concentration is within the range of 50 to 2000 parts per million.

14. (Previously Presented) In the synthesis of a crystalline molecular sieve by hydrothermal treatment of a synthesis mixture, the improvement comprising

including in said synthesis mixture the seed crystals obtained by the process of claim 1 to accelerate the rate of production of the crystalline molecular sieve.

15. (Previously Presented) In the synthesis of a crystalline molecular sieve by hydrothermal treatment of a synthesis mixture, the improvement comprising including in said synthesis mixture the seed crystals obtained by the process of claim 1 to control a characteristic of the resulting crystalline molecular sieve.

16. (Original) A process as claimed in claim 15, wherein the characteristic is the purity, the phase purity, the particle shape, the particle size, or the particle size distribution.

17. (Previously Presented) In the synthesis of a crystalline molecular sieve by hydrothermal treatment of a synthesis mixture, the improvement comprising including in said synthesis mixture the seed crystals obtained by the process of claim 1 to facilitate the manufacture of a crystalline molecular sieve in a synthesis mixture substantially free from organic structure-directing agent.

18. (Previously Presented) In the synthesis of a crystalline molecular sieve by hydrothermal treatment of a synthesis mixture, the improvement comprising including in said synthesis mixture the seed crystals obtained by the process of claim 1 to facilitate the manufacture of a crystalline molecular sieve, without stirring the synthesis mixture at least after the desired synthesis temperature has been reached.

19. (Cancelled)

20. (Cancelled)

21. (Cancelled)

22. (Currently Amended) A process for hydrocarbon conversion, separation, or adsorption, which is carried out in the presence of the product claimed in claim 11 ~~21~~.

23. (Currently Amended) A process of oxygenate conversion, which is carried out in the presence of the crystalline molecular sieve product as claimed in claim 11~~, said crystalline molecular sieve product being and selected from the group consisting of LEV, FER, TON, MFS, MFI, or MOR~~.

24. (Cancelled)